REMARKS

This is intended as a full and complete response to the Final Office Action dated July 29, 2003, having a shortened statutory period for response set to expire on October 29, 2003. Please reconsider the claims pending in the application for reasons discussed below.

Claim Rejections - 35 U.S.C. § 103

Claims 1, 3-4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Baumoel* (U.S. Patent 5,453,944) and *Proffitt* (U.S. Patent 5,415,024). The examiner states that *Baumoel* discloses determining components flow rates for multiple phases in the abstract and col. 3, lines 31-32.

Applicants respectfully traverse the rejection. Claims 1 and 4 recite the limitation of providing a trial value for each of either the component flow rates or phase fractions of the fluid and using a predetermined optimizing algorithm to determine whether calculated values based on the trial values are acceptable, and, if they are not, providing a new trial value for each of either the component flow rates or the phase fractions. To the contrary, Applicants submit that *Baumoel* teaches compensating a computed change in volume of the entire flow across a given length of pipe based on detected gas and detected presence of water. Merely compensating for aeration and/or water in a liquid in a pipeline as taught in *Baumoel* fails to teach, show or suggest providing a trial value for each of either the component flow rates or phase fractions and providing a new trial value through an iterative process, as claimed by the present invention.

On the other hand, *Proffitt* teaches an iteration based on a trial value of α, which is defined as flow rate of liquids out divided by flow rate of liquids in, and repeating the iteration process using subsequent approximations of α. Since the α taught in *Proffitt* is not a trial value for each of either the component flow rates or the phase fractions, *Proffitt* does not teach, show or suggest providing a trial value for each of either the component flow rates or phase fractions and providing a new trial value through an iterative process, as claimed by the present invention.

For the foregoing reasons, *Baumoel* and/or *Proffitt*, either alone or in combination, fail to teach, show or suggest providing a trial value for each of either

the component flow rates or phase fractions of the fluid, determining whether calculated values are acceptable based on an error value, and, if they are not, using a predetermined optimizing algorithm to provide a new trial value for each of either the component flow rates or the phase fractions, as recited in claims 1 and 4, and claims 2-3 and 5-6 dependent thereon.

Claim Objections

Claims 2 and 5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims.

Applicants respectfully submit that claims 2 and 5 are patentable over the cited references based at least on the traversal described above regarding the independent claims that these claims depend. Thus, Applicants respectfully request withdrawal of the objection and allowance of these claims.

Conclusion

Having addressed all issues set out in the Final Office Action, Applicant respectfully submits that the claims are in condition for allowance and respectfully request that the claims be allowed.

Respectfully submitted,

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